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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,298

06/21/2005

Scott D. Setzler

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06/20/2006

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EXAMINER

RODRIGUEZ, ARMANDO

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/540,298

Applicant(s)

SETZLER, SCOTT D.

Examiner

ARMANDO RODRIGUEZ

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-11 and 13-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 6-11, 14-16, 20-28 is/are rejected.  
7) ☒ Claim(s) 13 and 17-19 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1-4, 6-11, 13-28 are pending.

Claims 5 and 12 have been canceled.

### ***Claim Objections***

Claim 11 is objected to because of the following informalities: "nonometers" should read as nanometers. Appropriate correction is required.

Claim 18 is objected to because of the following informalities: the dependency of claim 18 should read as "17". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-11, 14-16, 20-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Sobey et al (US 5,457,707).

Regarding claims 1, 4, 11, 14,

Figure 1 illustrates a tunable laser system having a pump laser (14) [applicant's pumping] for pumping optical parametric oscillator (OPO) (10) and OPO (12), where the

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pump beam has a line width of  $0.02\text{ cm}^{-1}$  [applicant's line width], which when converted is 0.02 Angstrom [applicant's less than 5 nanometers], column 5 lines 6-13. Column 4 lines 14-16 discloses the output beam within the range of 400 to 2500 nanometers [applicant's infrared].

Regarding claim 2, 6, 7, 16,

Figure 1 illustrates a pumping OPO (10), which provides a seed beam.

Regarding claims 3, 15, 22

Figure 2 represents OPO (10), which includes a BBO crystal (34) {applicant's non-collinearly phase matched}.

Regarding claims 8-10, 26, 27, 28,

Column 3 lines 54-64, discloses the pump source (14) providing a beam within the range of 400 to 2500 nanometers [applicant's 5 micron], where the pump beam has a line width of  $0.02\text{ cm}^{-1}$  [applicant's line width], which when converted is 0.02 Angstrom [applicant's less than 5 nanometers], column 5 lines 6-13.

Regarding claims 20, 21, 23, 24, 25,

Figure 1 illustrates a tunable laser system having a pump laser (14) [applicant's pumping] for pumping optical parametric oscillator (OPO) (10) and OPO (12), where the pump beam has a line width of  $0.02\text{ cm}^{-1}$  [applicant's line width], which when converted is 0.02 Angstrom [applicant's less than 5 nanometers], column 5 lines 6-13. Column 4 lines 14-16 discloses the output beam within the range of 400 to 2500 nanometers.

Figure 1 illustrates a pumping OPO (10), which provides a seed beam.

***Allowable Subject Matter***

Claims 13, 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARMANDO RODRIGUEZ whose telephone number is 571-272-1952. The examiner can normally be reached on 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
ARMANDO RODRIGUEZ  
Primary Examiner  
Art Unit 2828

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